

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

February 8, 1998

TO: File for Sodium Soap 900602 (67701-11-5)  
FROM: Marco Bianchi, Toxics Unit, Air Quality Division  
SUBJECT: Initial Threshold Screening Level

The initial threshold screening level (ITSL) for *sodium soap 900602* is  $6 \text{ ug/m}^3$  based on an annual averaging time.

The following references or databases were searched to identify data to determine the ITSL: IRIS, HEAST, NTP Management Status Report, RTECS, EPB-CCD, EPB library, CAS-online, NLM-online, IARC, NIOSH Pocket Guide, and ACGIH Guide, and Patty's Industrial Hygiene and Toxicology.

A detailed database search was conducted for *sodium soap 900602*, but only limited information could be obtained to derive an ITSL. The Dial Corporation verbally provided data from an oral rat LD<sub>50</sub> study by telephone, but due to confidentiality issues would not provide a written copy of the complete study. According to this data, 5 male and 5 female Charles River white albino rats were orally dosed with a 10% aqueous solution of this soap product. No deaths occurred, and no adverse effects were noted immediately after dosing and 14 days post-dosing. The LD<sub>50</sub> was estimated to be >2000 mg/kg, which was used to derive the ITSL.

*The ITSL was determined as follows:*

LD<sub>50</sub> = 2000 mg/kg.

$$\text{ITSL} = \frac{1}{500} \times \frac{1}{40} \times \frac{1}{100} \times \frac{2000 \text{ mg/kg}}{0.167 \times 0.945} = 0.0063 \text{ mg/m}^3$$

*Conversion of mg/m<sup>3</sup> to ug/m<sup>3</sup>*

$$0.0063 \text{ mg/m}^3 \times 1000 = 6.3 \text{ ug/m}^3$$

**The ITSL for Sodium Soap 900602 =  $6 \text{ ug/m}^3$  based on an annual averaging.**

MB:SLB

cc: Mary Lee Hultin, Toxics Unit